

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number  
**WO 2004/057070 A3**

(51) International Patent Classification<sup>7</sup>: C01B 21/06, (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, 3/00, 35/04, 31/30, 33/06 AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:  
PCT/GB2003/005565

(22) International Filing Date:  
18 December 2003 (18.12.2003)

(25) Filing Language:  
English

(26) Publication Language:  
English

(30) Priority Data:  
0229662.2 20 December 2002 (20.12.2002) GB

(71) Applicant (*for all designated States except US*): UNIVERSITY OF NOTTINGHAM [GB/GB]; Nottingham NG7 2RD (GB).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): GREGORY, Duncan, Hudson [GB/GB]; University of Nottingham, Nottingham NG7 2RD (GB). GORDON, Alexandra, Georgina, Redcliffe [GB/GB]; University of Nottingham, Nottingham NG7 2RD (GB).

(74) Agent: ATKINSON, Jonathan, David, Mark; Urquhart-Dykes & Lord LLP, Tower North Central, Merrion Way, Leeds LS2 8PA (GB).

(81) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
19 August 2004

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: NANOSTRUCTURES

(57) **Abstract:** The present invention relates to nanotubes and in particular to a process and apparatus for the preparation of nanotubes. In particular, the present invention relates to nanotubes which are made from materials other than carbon or nanotubes containing carbon but which would not ordinarily be classed as carbon nanotubes on account of their low carbon content. The nanostructures of the present invention have a number of applications such as: ionic conductors/battery components, hydrogen storage, templating nanowires, electrical devices, catalysis and synthesis, flat screen technology, and mechanical applications.

WO 2004/057070 A3

## INTERNATIONAL SEARCH REPORT

PCT /GB 03/05565

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 C01B21/06 C01B3/00 C01B35/04 C01B31/30 C01B33/06					
According to International Patent Classification (IPC) or to both national classification and IPC					
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 7 C01B					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, CHEM ABS Data, INSPEC					
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>					
Category	Citation of document, with indication, where appropriate, of the relevant passages				Relevant to claim No.
X	US 6 398 125 B1 (JANG BOR ZENG ET AL) 4 June 2002 (2002-06-04) claims 6,9 ----- US 4 234 554 A (MUELLER GERTRAUDE ET AL) 18 November 1980 (1980-11-18) column 3, line 3 - line 12; claims 4,5 ----- US 2 488 054 A (DAVIS LEWIS W) 15 November 1949 (1949-11-15) column 3, line 12 - line 59; claims ----- US 2 910 347 A (ESMAY DONALD L) 27 October 1959 (1959-10-27) column 3, line 50 - line 55 ----- -/-				12
X					14
X					14, 15
A					12, 14
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.					
* Special categories of cited documents: *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed					
*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family					
Date of the actual completion of the international search		Date of mailing of the international search report			
6 July 2004		12/07/2004			
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  Zalm, W			

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